

**ABSTRACT**  
**COMPARISON BETWEEN POVIDONE IODINE EYEDROP**  
**2.5% AND CHLORAMPHENICOL EYEDROP 0.5%**  
**EFFECTIVITY IN DECREASING CONJUNCTIVAL BACTERIA**  
**COLONY ON ABDOMINAL DELIVERENCE NEONATES**  
**(Clinical experimental research in Soetomo Hospital Surabaya)**

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**Objective:** To analyze the effectivity between Povidone iodine eyedrop 2.5% and Chloramphenicol eyedrop 0.5% in decreasing conjunctival bacteria colony on caesarian section neonates at Dr. Soetomo Hospital, Surabaya

**Methods:** This study was a clinical experimental research, 21 subjects were enrolled, consisted of 32 eyes divided into 3 groups, Povidone iodine group, Chloramphenicol group, and control group. The study was conducted in neonatal and postpartum ward at Dr. Soetomo Hospital Surabaya during January-February 2019. Examination was done by conjunctival culture swab at lower fornix of the right and left eyelid an hour post delivery, and two hour after given prophylaxis. Bacterial culture then examined to identify the bacteria and colony count in the clinical microbiology laboratory.

**Results:** Wilcoxon sign rank test showed a difference in conjunctival bacteria colony count before and after treatment (Chloramphenicol  $p=0.026$  and Povidone iodine  $p=0.018$  respectively,  $p\leq 0.05$ ). Mann-Whitney test found the significant difference between Chloramphenicol group and control with  $p$  value = 0.023 ( $p\leq 0.05$ ), Povidone iodine group and control with  $p$  value = 0.008 ( $p\leq 0.05$ ), meanwhile no significant difference found between Chloramphenicol group and Povidone iodine group with  $p$  value = 0.340 ( $p\leq 0.05$ ).

**Conclusion:** There were no differences in Povidone iodine eyedrop 2.5% and Chloramphenicol eyedrop 0.5% in term of decreasing conjunctival bacteria colony on caesarian section neonates.

**Keywords:** bacteria, colony, conjunctiva, neonates, caesarian section